

03050109-100

(Reedy River)

General Description

Watershed 03050109-100 is located in Greenville County and consists primarily of the **Reedy River** and its tributaries from its origin to Huff Creek. The watershed occupies 73,754 acres of the Piedmont region of South Carolina. The predominant soil types consist of an association of the Cecil-Madison series. The erodibility of the soil (K) averages 0.26 and the slope of the terrain averages 15%, with a range of 2-40%. Land use/land cover in the watershed includes: 43.1% urban land, 42.8% forested land, 12.7% agricultural land, 0.6% forested wetland (swamp), 0.5% barren land, and 0.3% water.

The Reedy River originates near the Town of Travelers Rest and flows through the City of Greenville downstream to the Town of Fork Shoals, where it accepts the drainage of the Huff Creek watershed. Swan Lake, Little Creek, Langston Creek, Long Branch, Richland Creek, and Brushy Creek (Cow Creek) drain into the Reedy River as it flows through the City of Greenville. The river then accepts drainage from Marrow Bone Creek, flows through Conestee Lake, and accepts drainage from Laurel Creek near the Donaldson Industrial Park. Maddog Creek and Rocky Creek drain into the river further downstream. This watershed contains a total of 149.9 stream miles and 235.0 acres of lake waters, all classified FW. A portion of Paris Mountain State Park resides in this watershed.

Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
S-073	P/W	FW	REEDY R. AT UNNUMBERED ROAD OFF US 276, 3/4 MI. E OF TRAVELERS REST
S-928	BIO	FW	REEDY RIVER AT SR 88
S-264	S/W	FW	LANGSTON CREEK AT SC 253
S-319	W	FW	REEDY RIVER AT RIVERS STREET, DOWNTOWN GREENVILLE
S-013	P/SPRP	FW	REEDY RIVER AT S-23-30, 3.9 MILES SE OF GREENVILLE
S-067	S/W	FW	BRUSHY CREEK ON GREEN STREET EXT, BELOW DUNEAN MILL ON SC 20
S-867	BIO	FW	BRUSHY CREEK SR 30
S-018	P/I*	FW	REEDY RIVER AT S-23-448, 1.75 MILES SE OF CONESTEE
S-091	S/BIO/W	FW	ROCKY CREEK AT S-23-453, 3.5 MILES SW OF SIMPSONVILLE
S-323	P/SPRP	FW	REEDY RIVER AT S-23-316 3.5 MILES SSW OF MAULDIN
S-072	S/INT	FW	REEDY RIVER ON HWY 418 AT FORK SHOALS

* THIS STATION WAS INACTIVED DURING THE STUDY PERIOD, BUT IS USED FOR LONG TERM TREND DATA.

Reedy River - There are seven SCDHEC monitoring sites along this section of the Reedy River. At the furthest upstream site (**S-073**), aquatic life uses are fully supported; however, there are significant increasing trends in turbidity and total suspended solids. There is a significant increasing trend in pH. Recreational uses are not supported due to fecal coliform bacteria excursions, compounded by a significant increasing trend in fecal coliform bacteria. Aquatic life uses are partially supported at the next site downstream (**S-928**) based on macroinvertebrate community data.

Aquatic life uses are fully supported further downstream (**S-319**). Fluoranthene (a polycyclic aromatic hydrocarbon) was detected in the 1997 sediment sample. Recreational uses are not supported

due to fecal coliform bacteria excursions. Further downstream (*S-013*), aquatic life uses are fully supported; however, there is a significant increasing trend in total suspended solids. There is a significant increasing trend in pH. A significant decreasing trend in total nitrogen concentration suggests improving conditions for this parameter. Recreational uses are not supported at this site due to fecal coliform bacteria excursions.

At the next site downstream (*S-018*), aquatic life uses are fully supported. There was a significant decreasing trend in pH. A very high concentration of zinc was measured in the 1997 sediment sample. A significant increasing trend in dissolved oxygen concentration and significant decreasing trends in five-day biochemical oxygen demand, turbidity, total nitrogen concentration, and total suspended solids suggest improving conditions for these parameters. Recreational uses are not supported at this site due to fecal coliform bacteria excursions.

At the next downstream site (*S-323*), aquatic life uses are not supported due to the occurrence of copper in excess of the aquatic life acute standards. Recreational uses are not supported due to fecal coliform excursions. At the furthest downstream site (*S-072*), aquatic life uses are fully supported. Prior to 2001, this was a secondary monitoring station and sampling was intentionally biased towards periods with potentially low dissolved oxygen concentrations. A significant increasing trend in dissolved oxygen concentration and significant decreasing trends in five-day biochemical oxygen demand and turbidity suggest improving conditions for these parameters. Recreational uses are partially supported at this site due to fecal coliform bacteria excursions.

Langston Creek (S-264) - Prior to 2001, this was a secondary monitoring station and sampling was intentionally biased towards periods with potentially low dissolved oxygen concentrations. Aquatic life uses are fully supported. There is a significant increasing trend in pH. Recreational uses are not supported due to fecal coliform bacteria excursions.

Brushy Creek - There are two SCDHEC monitoring sites along Brushy Creek. At the upstream site (*S-067*), aquatic life uses are fully supported. Prior to 2001, this was a secondary monitoring station and sampling was intentionally biased towards periods with potentially low dissolved oxygen concentrations. Recreational uses are not supported at this site due to fecal coliform bacteria excursions. Aquatic life uses are partially supported at the downstream site (*S-867*) based on macroinvertebrate community data.

Rocky Creek (S-091) - Prior to 2001, this was a secondary monitoring station and sampling was intentionally biased towards periods with potentially low dissolved oxygen concentrations. Aquatic life uses are partially supported based on macroinvertebrate community data. There is a significant increasing trend in pH. Significant decreasing trends in five-day biochemical oxygen demand, turbidity, and total phosphorus concentration suggest improving conditions for these parameters. Recreational uses are not supported due to fecal coliform bacteria excursions.

NPDES Program

Active NPDES Facilities

RECEIVING STREAM

FACILITY NAME

PERMITTED FLOW @ PIPE (MGD)

NPDES#

TYPE

COMMENT

REEDY RIVER
WCRSA/LOWER REEDY RIVER PLT
PIPE #: 001 FLOW: 7.50
PIPE #: 001 FLOW: 11.50 (PROPOSED)

SC0024261
MAJOR DOMESTIC

REEDY RIVER
WCRSA/MAULDIN ROAD PLANT
PIPE #: 001 FLOW: 27.0-70.0

SC0041211
MAJOR DOMESTIC
BASED ON RIVER FLOW (HCR) UNTIL
2007, THEN 70.0 BASED ON 7Q10

ROCKY CREEK TRIBUTARY
MCGEE BROTHERS CO., INC.
PIPE #: 001 FLOW: 0.00036

SC0048071
MINOR INDUSTRIAL

LITTLE CREEK
ALTAMONT MOBILE HOME VILLAGE
PIPE #: 001 FLOW: 0.0135

SC0028533
MINOR DOMESTIC

BRUSHY CREEK TRIBUTARY
METROMONT MATERIALS/WHITE HORSE
PIPE #: 001 FLOW: M/R

SC0001295
MINOR INDUSTRIAL
PERMIT INACTIVATED 6/30/04

BRUSHY CREEK TRIBUTARY
COLLINS & AIKMAN/GREENVILLE
PIPE #: 001 FLOW: 0.20

SCG250116
MINOR INDUSTRIAL

BRUSHY CREEK TRIBUTARY
SOUTHERN WATER TREATMENT CO.
PIPE #: 001 FLOW: 0.50

SCG250165
MINOR INDUSTRIAL

COW CREEK
MILLIKEN & CO./JUDSON PLT
PIPE #: 001 FLOW: M/R

SCG250026
MINOR INDUSTRIAL

MARROW BONE CREEK
CRUCIBLE CHEMICAL CO.
PIPE #: 001 FLOW: 0.50

SCG250139
MINOR INDUSTRIAL

LAUREL CREEK
JOHN D. HOLLINGSWORTH ON WHEELS
PIPE #: 01S FLOW: M/R

SC0033774
MINOR INDUSTRIAL

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

LANDFILL NAME

FACILITY TYPE

PERMIT #

STATUS

CITY OF GREENVILLE LANDFILL
DOMESTIC

231002-1101
ACTIVE

CITY OF GREENVILLE
DOMESTIC

DWP-070
CLOSED

WCRSA
INDUSTRIAL

IWP-152

Land Applications

*LAND APPLICATION
FACILITY NAME*

*PERMIT #
TYPE*

PERCOLATION/EVAPORATION BASIN
METROMONT MATERIALS/PARIS MTN

ND0082139
INDUSTRIAL

Mining Activities

*MINING COMPANY
MINE NAME*

*PERMIT #
MINERAL*

BURDETTE ENTERPRISES, INC.
CONESTEE ROAD BORROW PIT

1101-45
SAND, SAND/CLAY

Growth Potential

There is a high potential for growth in this watershed, which contains portions of the Cities of Travelers Rest, Greenville, Mauldin, and Simpsonville. The City of Greenville has a very high potential to continue as an urban growth area, particularly in the area south of the city. Both the I-85 and I-385 corridors are in this watershed and contribute greatly to the growth. There are a large number of existing industrial sites near the I-385 corridor, together with the Donaldson Center and several rail lines to encourage more industrial growth. The two large regional wastewater treatment facilities in the area (Lower Reedy River Plant, Mauldin Road Plant) have dramatically increased in size and should spur industrial growth. Greenville County's zoning boundary will extend southward to S.C. 418 and should promote medium density development. Clemson University's proposed Automotive Research Park near I-85 and I-385 should promote industrial growth in the area as well.